IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	
Yoshinobu OKUNO et al.	:	
Serial No. NEW	:	**Attn: Application Branch**
Filed August 1, 2001	:	**Attorney Docket No. 2001_0977**

POLYPEPTIDES FOR USE IN GENERATING
ANTI-HUMAN INFLUENZA VIRUS ANTIBODIES
(AS AMENDED)
(Rule 1.53(b) Divisional
of Serial No. 09/004,422,
Filed January 8, 1998)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents,
Washington, DC 20231

Sir:

Prior to calculating the filing fee, please amend the above-identified application as follows:

IN THE CLAIMS

Cancel without prejudice claims 1-19.

Kindly add the following new claims:

20. An isolated gene which codes for a polypeptide having an antigenicity which is substantially the same as that of the stem region of hemagglutinin molecule of human influenza A virus.

21. The isolated gene as claimed in claim 20, wherein said gene has the DNA sequence of SEQ ID No. 46.

22. An isolated gene which codes for a polypeptide having an antigenicity which is substantially the same as that of the stem region of hemagglutinin molecule of human influenza A virus and lacking a globular head region of hemagglutinin molecule of human influenza A virus.

23. The isolated gene as claimed in claim 22, wherein said gene is selected from a gene having the DNA sequence of SEQ ID No. 49 and a gene having the DNA sequence of SEQ ID No. 57.

24. An isolated polypeptide, comprising an amino acid sequence which elicits an immune response in a mammal, which generates an antibody that specifically binds to an epitope located on both the HA1 and HA2 stem regions of hemagglutinin of intact human influenza virus subtypes H1N1, H2N2 or H3N2 and which lacks hemagglutinin activity of hemagglutinin of human influenza A virus.

25. The isolated polypeptide according to claim 24, wherein said polypeptide comprises an amino acid sequence including a TGLRN polypeptide sequence of SEQ ID No. 1 and a GITNKVNSVIEK polypeptide sequence of SEQ ID No. 2.

26. The isolated polypeptide according to claim 24, which is recognized by monoclonal antibody C179 produced by hybridoma C179 (FERM BP-4517).

27. The isolated polypeptide according to claim 24, wherein said polypeptide comprises an amino acid sequence including a TGMRN polypeptide sequence of SEQ ID No. 3 and a QINGKLNR(L/V)IEK polypeptide sequence of SEQ ID No. 4.

28. The isolated polypeptide according to claim 24, which is recognized by monoclonal antibody AI3C produced by hybridoma AI3C (FERM BP-4516).

29. A method for immunizing a mammal against human influenza A virus, which comprises administering to a mammal in need thereof an immunizing effective amount of the polypeptide according to claim 24.

30. A method for producing a monoclonal antibody which specifically binds to an epitope located on both the HA1 and HA2 stem regions of hemagglutinin of intact human influenza virus subtypes H1N1, H2N2 or H3N2, which comprises administering an antibody producing effective amount of the polypeptide according to claim 24 to a mammal, isolating spleen cells from the mammal, fusing the spleen cells with myeloma cells to produce hybridomas, and screening the hybridomas for an antibody which specifically binds to an epitope located on both the HA1 and HA2 stem regions of hemagglutinin of intact human influenza virus subtypes H1N1, H2N2 or H3N2.

REMARKS

The present application is a divisional of Serial No. 09/004,422 filed January 8, 1998.

The specification of the present application has been revised along the lines of the parent applications.

Original claims 1-19 are cancelled without prejudice and replaced with new claims 20-30. New claims 20-23 correspond to original claims 16-19 which were not elected in the grandparent application Serial No. 08/443,862. New claims 24-30 correspond to claims 26-30 and 33-34, respectively, which were cancelled without prejudice in the parent application is expedite allowance of that application.

Favorable action on the merits is solicited.

Respectfully submitted,

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